

**INDUSTRIES OF THE FUTURE: STATE PARTNERSHIPS TO ACCELERATE
INDUSTRIAL ENERGY EFFICIENCY DE-PS26-05NT42396-02**

ESTIMATED FUNDS AVAILABLE: \$1,000,000 - 2,000,000

ESTIMATED NUMBER OF PROJECTS: 10-20 projects

FUNDING CEILINGS/EXPECTED RANGE OF FUNDING: A maximum Federal share of \$100,000 is available for each project. It is expected that projects will be 12-18 months in duration.

COST SHARE: 30% or more from non-Federal funds is required.

BACKGROUND AND OBJECTIVES: The Industrial Technologies Program (ITP) partners with U.S. industry to improve industrial energy efficiency and environmental performance.

The ITP program's web site and the ITP strategic plan provide more background on the overall program and can be located at <http://www.eere.energy.gov/industry/> (main ITP web site) and http://www.oit.doe.gov/pdfs/strategic_plan.pdf (strategic plan.) The specific strategies from the strategic plan relevant to this funding opportunity are #1, 2, and 6 that target technology deployment, which generally are: Focus on energy intensive industry; use public/private partnerships; and perform technology delivery activities to improve near- and mid-term energy efficiency.

For this funding opportunity, ITP is targeting the small number of energy-intensive materials and process industries that account for over 75% of industrial energy consumption. Specifically, DOE is targeting large energy consuming industrial plants that have energy bills in excess of \$2 million per year. DOE has found that among the large energy consuming industrial plants, energy savings of up to 10% of the annual energy bill are achievable with minimal/no cost options. Activities should use public-private partnerships and deliver technology and information solutions available today that will improve best practices in energy management and result in significant energy savings in the large energy consuming plants. This website <http://65.122.17.25/leudzipcodelist.pdf> provides a listing of the large energy consuming industrial plants; the listing includes plant name, city, zip code and state.

The deliverable to DOE is a final report that shall discuss the identified cost savings in the large energy consuming plants and plans for implementation and follow-up. Identified cost savings should include energy savings and non-energy factors, such as maintenance benefits or costs, reduced downtime and costs, and environmental impacts. If appropriate, DOE will publish a case study document for dissemination to industry so that others can benefit from the results.

**PROJECT DESCRIPTION/APPLICATION REQUIREMENTS:
Outreach, Training, and Assessments**

Many energy-intensive industries and large energy consuming plants within these industries remain unaware of existing opportunities to increase their energy efficiency through adoption of advanced technologies and best energy management practices. States can play an active role in boosting the productivity and competitiveness of their

industrial base by working with national and local industrial stakeholder groups to raise the awareness and knowledge of industrial manufacturers to opportunities for energy efficiency and the impact that implementation of best practices in energy management can have on the corporate bottom line. Specifically, states can engage large energy consuming industrial plants, and introduce these plants to energy savings technologies opportunities, software tools and related training and other practices that can pinpoint and quantify the best opportunities for saving energy in these plants.

States are encouraged to carefully plan a set of targeted outreach activities directed at large energy consuming plants within the energy-intensive materials and process industries in their state and then to provide these plants with information, education, and assistance that will identify opportunities for improving energy efficiency. The Office of Energy Efficiency and Renewable Energy/Industrial Technologies Program (EERE/ITP) offers a variety of advanced technologies, tools, training, and materials that can assist in these efforts. State agencies are encouraged to leverage their outreach efforts by partnering with other entities such as industrial associations and suppliers, utilities, along with university and non-profit organizations to sponsor training classes, plant assessments, or targeted industrial outreach activities. Committed support from industrial companies, local and regional industrial associations and universities is particularly important. The objective of these activities is for large energy consuming industrial plants to identify and quantify opportunities for saving energy and improving environmental performance in their facilities. Ideally, the project activities will engage the large energy industrial consuming plants in communication on the benefits of adopting energy efficiency technologies and best practices in energy management and then make those energy efficiency improvements happen.

Projects Requested/ Areas of Interest: The applicant will work with national, state, and regional industrial partners, with whom they have established relations, to plan and conduct outreach and technical assistance activities that target the large energy consuming industrial plants in the state. Contacts with these large energy consuming plants should include “results oriented” information and support to highlight the opportunities and benefits that increased industrial energy efficiency can provide. The activities should target an energy intensive industry or industries that have a significant impact on the economy, employment, energy use, and environment of the Nation and the State.

- 1. Partnerships.** Work with existing or established State-Industry partnerships involving industrial manufacturers, state agencies (e.g., energy, economic development, science and technology offices), utilities, industrial associations, and/or universities that provide industrial or manufacturing services. Work with champions from industry to identify and contact targeted industrial plants. Work with experienced industry partner organizations to deliver information to these energy intensive industrial plants on EERE products and services and to explore opportunities for collaboratively promoting industrial energy efficiency, and ultimately help make energy efficiency occur.
- 2. Engage the top energy intensive plants in the State.** Through State-Industry Partnerships, discussed above, develop strategies for impacting key energy intensive industrial plants in the State. This activity would identify plants and/or companies to be targeted and detail a progressive strategy to promote and implement energy efficiency that should include some or all of the activities listed

in this section. A large industries energy users database that includes plant name, zip code and state can be found at <http://65.122.17.25/leudzipcodelist.pdf>.

3. **Conduct training classes on software tools and energy management best practices.** The State-Industry Partners will offer training in the application of best energy management practices or the software decision tools available through EERE/ITP, in collaboration with industry champions and stakeholders. The software tools, which are available on-line at http://www.oit.doe.gov/bestpractices/software_tools.shtml, can help to identify and analyze specific energy system savings opportunities in industrial plants. Specific tools address the efficient use of pumps, motors, compressed air systems, fans, process heating systems, and steam systems. The State or Industry Partners will use EERE/ITP's Qualified Specialists and Instructors, who have passed a rigorous training and examination processes, for these sessions. Information on EERE/ITP's Qualified Specialists and Qualified Instructors is available on the ITP/Best Practices website at www.eere.energy.gov/industry/training.
4. **Conduct industrial systems and plant assessments to identify opportunities for energy savings.** The State and other Industry Partners will use EERE/ITP's Qualified Specialists and/or Qualified Instructors to provide technical assistance support to the large energy consuming plants and use the EERE/ITP software tools and systems analysis techniques to identify opportunities to save energy and improve environmental performance. The technical assistance support should help the industry staff understand how to best apply the software tools, while outlining potential best practices in energy management and estimated energy and cost savings related to the potential systems modifications. While implementation of the identified opportunities is not mandatory, facilities receiving the assessments should agree to seriously consider the identified options. In addition, DOE strongly encourages replication of energy saving activities among companies. Evidence of previous audits where the company has implemented energy savings will be beneficial.

Evaluation Criteria: Applications will be evaluated according to the following criteria:

1. Responsiveness of the proposal to this funding opportunity. Applicants must demonstrate a clear understanding of the ITP objectives to target the small number of energy-intensive materials and process industries that account for over 75% of industrial energy consumption. Specifically, DOE is targeting large energy consuming industrial plants that have energy bills in excess of \$2 million per year. Applicants must use public/private partnerships to perform technology delivery activities to improve near- and mid-term energy efficiency and to show how their proposed approach is tightly aligned with these objectives. If proposed, evidence of the ability to plan and host conference/workshop events. Applicants must also demonstrate a clear understanding of the energy-intensive manufacturers in their state, define an energy savings goal to be achieved by 2009 and a plan detailing how that goal will be achieved. **(Weight 30)**
2. Capabilities of team or partnership to perform the proposed work. Applicants and their partners will be evaluated on their individual and collective experiences in working with industry and the large energy consuming industrial plants in the

State. Partnerships must include technology delivery activities to improve the near- and mid-term energy efficiency; preference will be given to **experienced partnerships** that show that they have a very high likelihood of success based on past activities. New partnerships will be considered; such partnerships should provide evidence that demonstrates a high likelihood of success. All applicants should indicate the specific roles that industry partners will have in developing and implementing various proposed activities. Letters of commitment, outlining specific roles or tasks, must be included from all identified partners. The qualifications, past performance and experience of persons and organizations proposed for conducting plant assessments or training on software tools will be examined closely. There should be a documented progression of past activities, from distribution of materials to plant assessments, showing the energy saving results. **(Weight 30)**

3. Likelihood of the project to deliver the highest amount of industrial energy (kwh and Btu) savings within the state. This includes the number and size of large energy-intensive plants in the state, the method being proposed to make the energy saving activities to occur, and the past ability of the partnerships to move the industrial plants to identify savings and ultimately implement the changes that save energy. Applicants should identify the potential for energy savings that will be affected by their proposed project. The approach should be designed to maximize the probability for implementation and replication of energy savings opportunities and to maximize the likelihood that the energy savings goal can be met. **(Weight 30)**
4. Clearly stated project deliverables. Each application **must** have a complete table containing the following project deliverables **(Weight 10)**:
 - a. Milestones tied to the energy saving goals
 - b. Planned start and completion dates
 - c. Responsible organization (who is performing the work)
 - d. Dollars required for completion of each milestone -- both Federal dollars and the cost-share dollars for that milestone if applicable

SPECIAL REQUIREMENTS: Successful applicants will be expected to participate in a maximum of two one-day project reviews coordinated by the DOE Regional Office serving them during each calendar year of the project. Applicants are expected to include the costs associated with transportation and lodging needed for participation in these events in their proposal and budget.